



Glenda Ritz, NBCT  
Indiana Superintendent of Public Instruction

# Teachers' Toolbox

A content focused resource for classroom instruction



April 2016

Do you live here and want free PD on Math Process Standards?

Do you live here and want free PD on DOK questioning?

Do you live here and want free PD on incorporating STEM into your instruction?

Did you know that many of the specialists in CCR are available to come and facilitate workshops and PDs for your school or district – free of charge?!?

Do you live here and want free PD on <insert topic here>?

Do you live here and want free PD on Content Area Literacy?

For a specialist to travel to your area, at least 30 people are needed to be in attendance for the session. We encourage you to invite other area schools!

Contact the specialist directly to discuss topics and dates for future PD

## Free Access to eBooks

On February 24, 2016, The White House shared a blog [post](#) about access they have gained for students to free eBooks. To find out more about how you and your students can access free eBooks go to [www.OpeneBooks.net](http://www.OpeneBooks.net).

*"No matter who you are, where you live, or how much money you've got, you should be able to access the world's knowledge and information just like anyone else."*

--President Obama,  
Anacostia Library, April 30, 2015

## IDOE Summer Professional Development

This summer some of the content specialists from CCR are teaming up with the Outreach Division to offer professional development around the state. This PD tour is designed for teachers of all grade levels and many contents. Stay tuned for dates and sites! Check the [IDOE website](#) for updates.

## A Note from...

**Peggy Wild,**  
State Director of Career and Technical Education

Dear Friends in Education,

Welcome to the April edition of Teachers' Toolbox. April is National Humor Month, Keep America Beautiful Month, and National Poetry Month, in addition to, "Be a Teacher – Change the World!" Month. We hope the pages in April's Toolbox inspire, motivate and provide a boost to energize you for the remaining weeks of this school year. Please share with your colleagues; we invite you all to share best practices and bright ideas with each other and with us. We would love to circulate your tips, tricks and tools of the trade in these pages in coming issues. Best wishes for an awesome April!

## CCR Specialists

### Bruce Blomberg

Social Studies

### Jarred Corwin

Secondary Science/STEM

### Nick Flowers

Elem. Math/Science/STEM

### Celya Glowacki

Agriculture and Pathways

### Dena Irwin

Business/Marketing/IT

### Sue Henry

Health Science/Heath/P.E.

### Julia Johns

Alternative Ed/Literacy

### Jill Lyday

Literacy/Hoosier

Family of Readers

### Alyson McIntyre-Reiger

FACS and Work Based Learning

### Amy Marschand

High Ability

### Melanie Martz

Secondary Literacy

### Davis Moore

Trade and Industry

### Bill Reed

Secondary Math/STEM

### Mary Rinehart

Engineering and Technology

### Jill Woerner

Global Learning and World

Languages

### John Wolf

Elementary Literacy

Find past editions of Teachers' Toolbox [here](#).

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## Directions for joining the Learning Connection:

1. Go to [www.learningconnection.doe.in.gov](http://www.learningconnection.doe.in.gov)
2. Join/log in to Learning Connection
3. Choose "My Communities," then click "Find A Community"
4. Leave "IDOE Community" search option filled
5. Type in the name of the community into the keyword box

Many of the specialists also maintain Learning Connection Communities for their content area. Below you will find names of communities that may be of interest to you!

- "Teachers of Students with High Abilities"
- "Curriculum and Instruction"
- "Assessment Information for Teachers"
- "Social Studies Collaborative"
- "Indiana Literacy Liaisons...Read On, Indiana!"
- "Elementary Math, Science, and STEM"
- "Literacy in the Middle" (Middle School)
- "Indiana Mathematics"
- "Health Educators"
- "Science Educators Discussion Group"
- "Secondary ELA/Literacy Collaborative"
- "World Languages and Cultures"
- "Family and Consumer Sciences Educators and Friends"
- "Indiana Engineering and Technology Education"
- "Business Marketing and IT Education"
- "Alternative Education"
- "AP Teachers and Coordinators"
- "Indiana Agriculture Education Teachers"



## Summer Travel Possibilities

<https://www.geeo.org/summary/>



Do you love to travel? Are you having a hard time trying to decide where to go on your next vacation? If so, you should checkout the Geeo.org website that caters to helping educators travel the world. This non-profit offers many destinations that can help you gain real-world experiences and professional development you can bring back to your classroom. They have several locations being offered during the summer months including Bali, China, Galapagos, Greece, Ireland, Africa, Italy, Morocco, Spain, Peru, and more! Take a trip and get revitalized for the next school year!

## High Ability Food for Thought

**"The surest path to positive self-esteem is to succeed at something which one perceived would be difficult. Each time we steal a student's struggle by insisting they do work too easy for them, we steal their opportunity to have an esteem-building experience."**

— [Sylvia B. Rimm](#)

# Elementary STEM

Teachers' Toolbox

Focused on Science, Technology, Engineering, and Mathematics

April 2016

## Rigor with Mathematics

One of the shifts in mathematics is rigor. It refers to a deeper, authentic command of mathematical concepts, not having problems and tasks being harder or introducing topics at earlier grades. Rigor is broken down into three concepts: conceptual understanding, modeling/application, and fluency/procedural skill. Think of rigor as a three-legged stool, for the stool to stay standing you need three legs just as you need all three components of rigor within mathematics curriculum and instruction.

### Conceptual Understanding:

- More than “how to get the answer”
- Supports the students’ ability to access concepts from a number of perspectives
- Shows math as more than a set of mnemonics or discrete procedures
- Supports the other aspects of rigor

### Fluency/Procedural Skill:

- Fluency is Efficient and Accurate
- Applies flexible thinking beyond the standard algorithm
- Entails reasoning and sense making
- More than computation, there is understanding attached

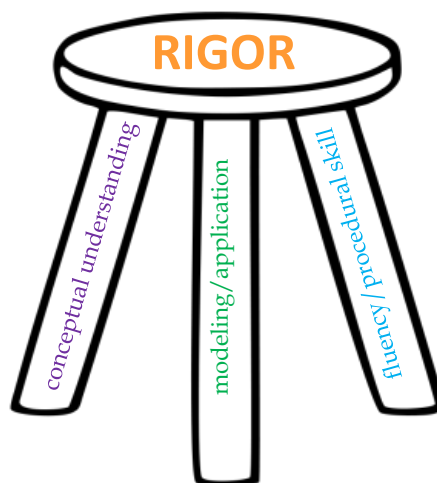
### Fluency Grade Level Standards:

- 1<sup>st</sup> grade – add and subtract within 20
- 2<sup>nd</sup> grade – add and subtract within 100
- 3<sup>rd</sup> grade – multiply/divide facts 0 to 10; add/subtract within 1,000
- 4<sup>th</sup> grade – add/subtract multi-digit whole numbers; multiply within 100
- 5<sup>th</sup> grade – multiply multi-digit whole numbers
- 6<sup>th</sup> grade – divide multi-digit whole numbers; compute positive decimals and fractions
- 7<sup>th</sup> grade – computing rational numbers
- 8<sup>th</sup> grade – linear equations with rational number coefficients

### Conversation Starters and Questions:

*Here are some questions to ask yourselves about how mathematical rigor looks in your classroom and district...*

- How do you build the three areas of rigor into your current curriculum?
- What is a fluent mathematical student in your classroom/school?
- How are the fluently standards assessed?
- What investigative tasks do you build into your curriculum for students to demonstrate conceptual understanding and/or fluency/procedural skills?
- How do you build conceptual understanding?
- How does conceptual understanding support fluency/procedural skills?



### Modeling/Application:

- Students are able to show their conceptual understanding through effective investigative tasks.



### Connect with me...

Nick Flowers

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Learning Connection Community:  
Elementary Math, Science, and STEM

Twitter: @MrNickFlowers

Use #INelemSTEM to showcase the great science, technology, engineering, and/or math activities going on at the elementary setting.

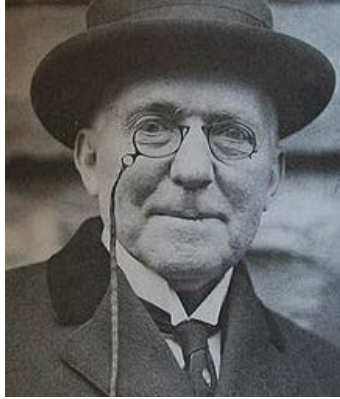


## National Poetry Month

**Who started it?** *The Academy of American Poets established National Poetry Month in 1996 inspired by the successful celebrations of Black History Month and Women's History Month.*

**What are the goals of National Poetry Month?** *Some of the many goals of National Poetry Month are to encourage the reading of poems, assist teachers in bringing poetry into their classroom, and encourage support for poets and poetry.*

**Who are popular Indiana poets?**  
[James Whitcomb Riley](#) see more [here](#)



Riley was known as the "Hoosier Poet" and his famous works include "Little Orphant Annie" and "The Raggedy Man."

### Resource Highlights

- ❖ [Poets.org](#) This website provides some educator resources (lesson plans, postings from contributors on how to teach poetry, and access to poems). Their ["Teach This Poem"](#) program provides a teachers with a poem a week (via email) from their online poetry collection. The poem is accompanied by interdisciplinary resources and activities designed to help teachers bring poetry into their classroom.
- ❖ [ReadWriteThink.org](#) Many teachers may already be familiar with this website and the abundance of resources it houses. A teacher can easily take whole lessons or ideas or bits and pieces provided via RWT and incorporate into his/her curriculum. RWT has many poetry resources for all grade levels. A few to check out are: ["Aim for the Heart: Using Haiku to Identify Theme,"](#) ["Choose, Select, Opt, or Settle: Exploring Word Choice in Poetry,"](#) and ["Put That on the List: Collaboratively Writing a Catalog Poem."](#)
- ❖ [EDSITEment National Poetry Month Exemplars](#) is a resource created by the National Endowment for the Humanities that contains standalone lessons for well-known poets (i.e. Emily Dickinson, Rita Dove, and Lewis Carroll). The poem-specific resource includes a lesson plan, related resources, a link to the poem, and background on the author. The resources are aligned to Common Core; refer to the [Indiana Academic Standard Correlation documents](#) to find the correlating Indiana Standard.

### Questioning that Deepens Comprehension

Literacy leaders Douglas Fisher and Nancy Frey have shared many great ideas with the field. Together they have co-authored a blog post for Edutopia on [Questioning that Deepens Comprehension](#). Fisher and Frey propose "four over-arching questions that can be used to scaffold students' thinking about complex text (Fisher and Frey)."

1. **What does the text say?**  
a) What is the relationship between the narrator and the main character?
2. **How does the text work?**  
b) Are there any analogies or metaphors? What do they mean?
3. **What does the text mean?**  
c) What is the author's attitude toward \_\_\_\_\_? What is your evidence of this from the text?
4. **What does the text inspire you to do?**  
d) Do you want to write a letter to the author?

### Strategy Spotlight:

#### How to Introduce Poetry:

- Use the ["I Am" Poem](#) to start students off writing about what they know best-themselves!
- Use "bell ringers" or Anticipatory Sets to bring small doses of poetry into the lesson
- Read aloud poems to model for students how poems can be read with different dialects, cadences, etc.

#### How to Engage Students in Poetry:

- Allow for student choice and student directed finding of poems
- Use recent song lyrics to help demonstrate literary devices and poetry conventions
- Include visuals (videos/images)

## Fluency FOCUS

April's [FOCUS newsletter](#) is posted. Find past editions of the FOCUS newsletter in the Literacy Liaisons Learning Community.

*Provided by John Wolf, Elementary Literacy Specialist*

## Welcome, Spring!

### After the Winter

[Claude McKay, 1889 - 1948](#)

*Some day, when trees have shed their leaves  
And against the morning's white  
The shivering birds beneath the eaves  
Have sheltered for the night,  
We'll turn our faces southward, love,  
Toward the summer isle  
Where bamboos spire to shafted grove  
And wide-mouthed orchids smile.*

*And we will seek the quiet hill  
Where towers the cotton tree,  
And leaps the laughing crystal rill,  
And works the droning bee.  
And we will build a cottage there  
Beside an open glade,  
With black-ribbed blue-bells blowing near,  
And ferns that never fade.*

## Specialist Contacts

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# Secondary Science

Teachers' Toolbox

April 2016



## Reflecting

As students learn and grow, they need time to reflect on their prior knowledge, shift in thinking, and comprehension. As the school year progresses, finding the time to make this happen becomes difficult. The links in the resources provide various strategies to build in time for reflection, give prompts for reflection, and acquire formative data as students reflect. All of these strategies can be used as exit passes, entrance passes, pre-labs, post-labs, or in conjunction with other various assignments. When properly paired with other educational experiences (hands on labs, simulations, etc.), reflecting becomes an opportunity to build upon prior knowledge and link those experiences to growth in knowledge. John Dewey stated it best, "We do not learn from experience... we learn from reflecting on experience."

One way to have students reflect on learning is to have them summarize the lesson/unit/lab. There are many ways to have students summarize and one of my favorites is **draw and caption**. Students take a few minutes to sit and reflect quietly. They then have one minute to draw a quick summary sketch. The image is not a masterpiece, but a quick snapshot of the overarching theme. They then write a caption (not longer than a caption in a newspaper/magazine), explaining how the image summarizes the content.

## Resources:

### Summarizing Strategies

- [http://www.gcasd.org/Downloads/Summarizing Strategies.pdf](http://www.gcasd.org/Downloads/Summarizing%20Strategies.pdf)

### Exit Slips/Tickets

- <http://www.ascd.org/publications/educational-leadership/oct12/vol70/num02/The-Many-Uses-of-Exit-Slips.aspx>

## Safety in Numbers

As educators, we try to make our classes as engaging, hands on, and experiential as possible. At what point are there too many students in a classroom for one teacher to safely delve into that hands on science? NSTA recommends that a middle school/high school science course not have more than 24 students and that there is enough room, 60 square feet/student net in a combination classroom/laboratory and 50 square feet/student net in a pure laboratory room. As the number of students rise past 24 or the square feet/student lowers, the amounts of accidents drastically rises. Find the full research and article in the resources.

## Resources:

### NSTA Safety

- <http://tinyurl.com/NSTASafety>

### CSSS Safety

- <http://tinyurl.com/CSSSSafety>

## SPRING has Sprung

Try some of these simple science activities as brain breaks or a way to jump back in after spring break

<http://www.science-sparks.com/2014/03/23/spring-science-activities/>

## Specialist Contact

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Secondary Science and  
STEM Specialist  
Follow us on the [Learning Connection Science Educator's Discussion Group](#)



# Secondary Math

Teachers' Toolbox

April 2016

## Math Magic:



## What are you doing for YOUR Mathematical Growth?

It's April! Spring Break has come and gone. Now you set in for the long haul until the end of the school year and all the end of the year assessments. I have an interesting question for you. What are you doing for yourself to grow and continue your desire for the mathematics you love and admire? Are you doing anything for yourself to grow mathematically? Have you worked any fun problems or solve any mathematical equations just for the pure enjoyment of the mathematics? You all know why most math teachers are called geeks. It is because we truly love math! I want to challenge you to find something mathematical that is fun and interesting to keep your love of math going. That will translate to your students. It will help you identify with them as they

are also making the final push for the end of the school year. I was trying to find a fun math problem to work on myself and ran across a problem I found very interesting and intellectually challenging. It was how to find what day of the week any date will fall on? It uses a very interesting formula that includes unusual math ideas like the greatest integer function and modulo division. The formula can be found at: <http://www.curiousmath.com/articles/Calendar-Math.html>. All I did was Google search for "Curious and Useful Math" and there were many cool sites to explore. Other searches to try are "Weird Math" and "Math Tricks". You will find all kinds of neat mathematical ideas. Some you know and recognize and others will add something new to your arsenal for your classroom. The bottom line here is never stop learning new topics or ideas in mathematics. Go out and explore the world of mathematics. Fall in love with math all over again and have some fun while doing it. You will be a better teacher if you keep learning yourself. Click here to learn something new and interesting. [http://Surprise 1](#), [http://Surprise 2](#), [http://Surprise 3](#), [http://Surprise 4](#), [http://Surprise 5](#), Enjoy!!!

## Content News:

### Global Learning in Math

Each of you strive to make the math that your students do relevant to everyday life so why not add its relevance to the world as well? There are resources out there to help you get started. Our Indiana Academic Math Standards have been internationalized to help provide you with examples of just how to integrate global thinking into your math class daily. Here's an example:

**Subject:** Geometry – **Strand:** Circles – **Academic Standard Indicator:** G.CI.4

**Standard Description:** Solve real-world and other mathematical problems that involve finding measures of circumference, areas of circles and sectors, and arc lengths and related angles (central, inscribes, and intersections of secants and tangents).

**Suggestion for Integrating International Content:** Have students use the locations of various major cities around the world, as given by longitude and latitude, to determine the distance between cities.

*Stay tuned for the full version for all grade levels to be released so you can do this with every standard*

**Resources:** <http://www.doe.in.gov/sites/default/files/ccr/6-12-math-iasi-2014-final.pdf>  
<http://www.doe.in.gov/ccr/global-learning-and-world-languages>

## Specialist Contact:

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Secondary Math and STEM Specialist



# Social Studies

Teachers' Toolbox

April 2016



## INDIANA SUPREME COURT TO CELEBRATE BICENTENNIAL WITH ORAL ARGUMENT IN ORIGINAL CAPITAL BUILDING

The Indiana Supreme Court will travel to Harrison County in April 2016 to hold oral argument in the historic State House in Corydon. The premier event for the judicial branch to celebrate the state bicentennial will include a modern day argument in the original location of state government. The event is endorsed by the State Bicentennial Commission and sponsored in collaboration with the Indiana Department of Education.

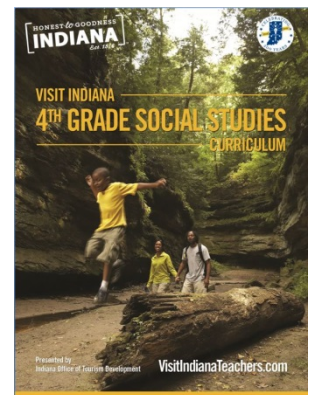
The DOE is encouraging classrooms across the state to participate through a webcast of the argument. Educators will have access to case briefs and other educational resources through the Supreme Court's *Courts in the Classroom* program at <http://www.in.gov/judiciary/citc/>.

### VISIT INDIANA: 4<sup>TH</sup> GRADE SOCIAL STUDIES CURRICULUM

Teachers, bring Indiana history to life with our free lesson plans and classroom resources, Indiana Tourism is pleased to offer this interactive, six-week social studies course for 4th grade teachers.

The curriculum provides a complete set of tools, lesson plans and classroom ideas to help you engage your students in an exciting exploration of Indiana's history. Created by teachers for teachers, the curriculum is designed to meet the state of Indiana's academic standards for 4th grade social studies. It uses critical thinking, problem solving and collaboration to help your students discover the many historical attractions and natural wonders that Indiana has to offer—and inspire them to explore the great state we call home!

**CLICK ON THE PICTURE TO DOWNLOAD**



## APRIL 4, 1968 – MARTIN LUTHER KING, JR. ASSASSINATED



Click on the picture to hear Robert Kennedy's speech

Robert F. Kennedy was on the presidential campaign trail in Indiana on April 4, 1968, the day of Martin Luther King's assassination. Earlier in the day, Kennedy spoke at Ball State University in Muncie. He was scheduled to speak at an outside rally in an Indianapolis inner city neighborhood that evening.

Against the advice of his staff members and Indianapolis city officials, Kennedy chose to speak at the event. He delivered a six-minute, sincere, clear, and heartfelt speech to the interracial crowd, composed primarily of African Americans. He empathized with the crowd, sharing that his brother, President John F. Kennedy, had also been killed by an assassin's bullet. He implored the crowd not to react with violence. The reaction of local black leadership and Kennedy's words have been credited for the tranquility in Indianapolis.

# World Languages

Teachers' Toolbox

April 2016

## Authentic Audiences... and Resources!

You're in class, you're trying to keep things in the target language and you want your students to "get it". The pictures in the book and the manipulatives that have always worked just aren't helping your students connect with the target language and culture! We've all been there. Let the April Edition of the Teachers' Toolbox help you!

### Take a virtual tour of your target culture!

Find 360° video tours & stunning panoramic photos of your target culture using [Airpano](#). Your students can view the Neuschwanstein Castle in Germany in their pursuit of fairy tale inspiration, see the tango straight from Argentina or even see the Yuanyang rice terraces of China while studying economic development. This is also a wonderful use of powerful images to get students and parents excited about going abroad!

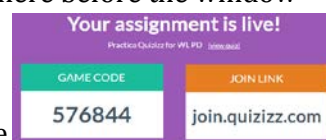
### The POWER of Infographics! Have you tried them?

Staying in the target language much easier if your students have graphics to help them have context for what you're sharing. You can go much farther by utilizing graphic representations of the material you are trying to present. **Pinterest** is a **GREAT** resource for finding infographics. Your students can create them too! Give them a try!!



### Two from the field:

Are your students tired of Kahoot? Try [Quizizz](#)! Quizizz is very similar with a few distinct features. You can assign it as homework, it assigns the meme to students randomly & the answers are directly printed on the answer boxes. Try it out here before the window closes on 4/17/16!!



Don't have the time or \$\$ for a field trip? Try a virtual one! Use "Google's Tour Builder" to use a selection of photos in conjunction with Google Maps to build a global tour for wherever you want your students to go! Great for every language!!

### Connect me... PLEASE!

In the last edition, I was seeking French teachers who wanted a partner school. Now I want to hear from ALL of you that want to make that international connection with a school abroad. I don't have connections all over YET, but I will certainly try to help you connect! Just fill out [this form](#) to tell me where you're from and with whom you'd like to connect!

#### List of Indiana cities that have a Sister City

- [https://en.wikipedia.org/wiki/List\\_of\\_sister\\_cities\\_in\\_the\\_United\\_States](https://en.wikipedia.org/wiki/List_of_sister_cities_in_the_United_States)

#### IDOE has Memoranda of Understanding with:

Alsace Region, France      Taiwan  
Zhejiang Province, China      Spain

**Are you a Twitter user?** Join me on Twitter @globalEDindiana to stay in touch with language learning and great ideas. You can screen shot the ones you love and revisit them before school starts! Truly language on the go!

#### Don't forget... to connect with us at

[www.learningconnection.doe.in.gov](http://www.learningconnection.doe.in.gov) for IDOE's World Language & Cultures Community



### Coming Soon:

#### Summer is coming!!

Stay tuned for our next edition with ideas for you and your students throughout the summer months! There will be a summer schedule of PD opportunities, a book study list, online resources and more!

### Content News

If you missed the Central States Conference on the Teaching of Foreign Languages in March, you can check out the handouts from many of the sessions here: <https://www.pinterest.com/cscftl/cscf/lofla-2016-presentations/>

#### Save these dates...

##### Global Crossroads Conference

June 20, 2016

"Connect, Engage, Exchange"

##### IFLTA Conference

November 3-5, 2016 (Indy)

"Working Locally, Reaching Globally"

### Specialist Contact

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# Business, Marketing, Information Technology, & Entrepreneurship

Teachers' Toolbox

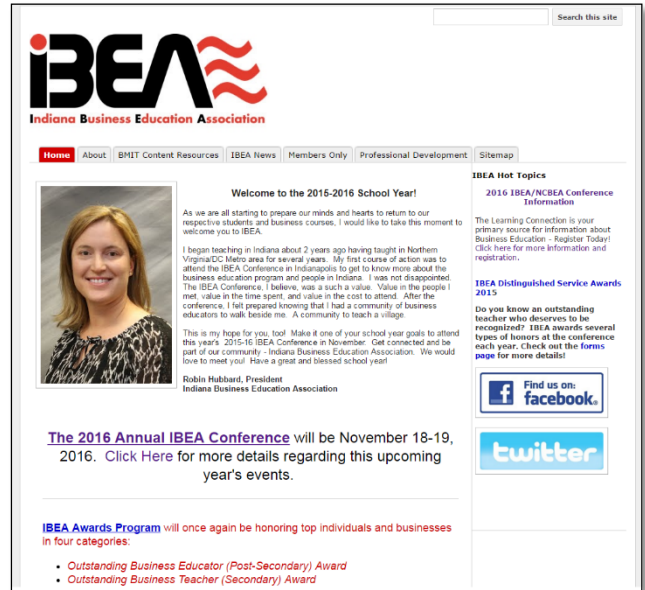
April 2016

## Indiana Business Education Association NEW Website

IBEA recently launched a brand new website complete with resources, news, professional development opportunities, student scholarships, awards, and conference information.

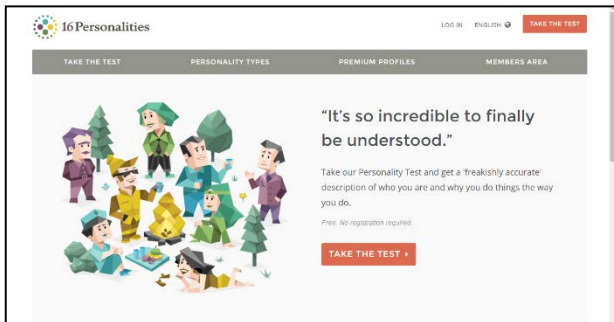
They are currently accepting speaker proposals for the annual November conference and nominations for the five IBEA awards.

Dues for this professional affiliate are \$25 per year for teachers, \$5 for retirees and college business students. Membership forms can be found under the "About" tab, then click membership. Dues for other affiliates (IMEA, IACTE, NBEA) can be paid on the same form.

The screenshot shows the IBEA website homepage. At the top is the IBEA logo with the text "Indiana Business Education Association". Below the logo is a navigation bar with links: Home, About, BME Content Resources, IBEA News, Members Only, Professional Development, and Sitemap. The main content area features a "Welcome to the 2016-2016 School Year!" message with a photo of Robin Hubbard, President of IBEA. To the right, there are sections for "IBEA Hot Topics" (2016 IBEA/NCEA Conference Information) and "IBEA Distinguished Service Awards 2015". At the bottom, there is a section for "The 2016 Annual IBEA Conference" and "IBEA Awards Program" which lists four categories: Outstanding Business Educator (Post-Secondary) Award, Outstanding Business Teacher (Secondary) Award, Outstanding Business Student (Secondary) Award, and Outstanding Business Leader (Secondary) Award. Social media links for Facebook and Twitter are also present.

[www.in-ibea.org](http://www.in-ibea.org)

## Preparing for College and Careers Resource for Personality Types

The screenshot shows the 16Personalities website. The header includes the 16Personalities logo and navigation links: TAKE THE TEST, PERSONALITY TYPES, PREMIUM PROFILES, and MEMBERS AREA. The main content area features a large illustration of diverse people and the text: "It's so incredible to finally be understood." Below this, it says "Take our Personality Test and get a 'freakishly accurate' description of who you are and why you do things the way you do." and "Free. No registration required." There is a "TAKE THE TEST" button.

Part of the PCC standards for "Exploring Self" include looking at one's aptitudes, traits, interests, attitudes, skill set, learning style, and personality type. Students can take a **FREE** personality test at [www.16personalities.com](http://www.16personalities.com). Once the students get the test results for their personality type, the website goes on to explain the strengths and weaknesses, career paths, workplace habits, and other details about each type.

I learned that I am ESFJ—"The Consul" personality type and the description is dead on. Have fun with this in your classroom!!

## Microsoft Imagine Academy

Use this link to join the Academy and request MOS vouchers and teaching resources for high school students. Middle level students can have access to the resources too, but not the exams currently: <https://docs.google.com/forms/d/1qNAU3qe2fD4MI9MxjzlmX39InrkKU0J7tZaDGWZXI/XY/viewform>

### State Program Leader

Dena Irwin

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# Trade & Industry

Teachers' Toolbox

April 2016


## Teaching to Lead

World-class teachers are the key to increasing CTE students' college and career readiness. Teaching to Lead (T2L), a research-based preparation program for new and early career CTE teachers, improves teacher competence and self-efficacy and has been shown to increase teacher retention.

Field-tested with CTE teachers, T2L features problem-based learning modules in instructional planning, instructional strategies, assessment and classroom management delivered across 10 days of intensive professional development supplemented with on-site coaching by expert NRCCTE at SREB facilitators.

T2L also helps prepare teachers for other NRCCTE and SREB professional development models, including Math-in-CTE, Literacy-in-CTE, and Project-Based Learning for Career Pathways.

For more information contact NRCCTE Director James Stone at [james.stone@nrccte.org](mailto:james.stone@nrccte.org).



*"Teaching to Lead not only taught me how to be an effective teacher but also taught me the importance of student learning and how critical it is to differentiate learning for all students."*

## Opportunities

- This Summer Vincennes University and Lincoln Electric are hosting their annual Welding Workshop. Spend three days on the beautiful VU campus learning the latest welding processes on state of the art equipment. There will be two workshops. One for experienced teachers the other for newer teachers. This is open to all instructors. For more information contact Davis Moore at the address below.
- Don't miss the Annual Skills USA State Skills Competition. That happens April 15-17<sup>th</sup> at the Indiana State Fairgrounds. Watch students compete in a number of skilled competitions. We're also looking for judges and volunteers. Contact Davis Moore at the number below for more information.

Davis Moore  
317-232-0512  
[dmoore@doe.in.gov](mailto:dmoore@doe.in.gov)

## Happenings

Porter County Career Center's Television Broadcasting Program was named best in the state by the Indiana Association of School Broadcasters at a ceremony at the University of Indianapolis.

The program also boasted wins in nine other categories including Public Service Announcement, Television Package, and Short Film.

This is the second consecutive win for the program's video production team.



## Addressing the T&E in STEM

STEM is often used to describe so many programs, processes, and types of curriculum. What does integrative STEM mean? **Integrative STEM** is an instructional approach that gives teachers the ability to construct a multifaceted learning experience by purposefully integrating STEM disciplines *through student technological/engineering design problems* (Adapted from Cantu, 2015). All of the content in technology and engineering courses is valuable in many ways, but it is not integrative STEM unless you are purposefully incorporating science and math in the students' learning experiences. This month's challenge is to think of how you can incorporate science and math into the curriculum you already use. Start by asking fellow math and science teachers to work with you to create projects that are truly integrative and meaningful.

## Home of the Future Lesson

Looking for a lesson that is related to green technology and the environment and incorporates content literacy?

Look no further! USA Today provides a special reprint of this article with lesson resources including discussion questions, activities, and a graphic organizer.

Download the PDF here for free:

[http://usatoday30.usatoday.com/educate/reading/20071126\\_GAFRI\\_green.pdf](http://usatoday30.usatoday.com/educate/reading/20071126_GAFRI_green.pdf)

## Content News

The **Middle School Engineering and Technology Standards** are currently under public review. To give your input, please complete the survey at <https://www.surveymonkey.com/r/engineeringandtechnology>

The IDOE is exploring the idea of piloting the **Engineering by Design (EbD)** curriculum and need to know who might be interested in piloting it. Please email [mrinehart@doe.in.gov](mailto:mrinehart@doe.in.gov) if you are interested in learning more.

## 10 Promising Practices to Interest Girls in Engineering

1. Make a commitment to include girls and set a goal.
2. Reach out to more kinds of students.
3. Be mindful of your messaging.
4. Know your audience and create marketing content that is culturally responsive .
5. Partner with school and community groups who can advocate for your program with families.
6. Make recruitment interactive.
7. Use the power of peers.
8. Partner with organizations that work with girls like Girl Scouts and Girls, Inc.
9. Make it easier for youth to participate in your program by arranging transportation.
10. Consider holding a course just for girls.

Source/Read the full article at:

<http://www.linkengineering.org/Prepare/6440/12279.aspx>

## Recruitment Strategies

- It is the time of the year when students are choosing what courses to take next year. How can you keep your courses full of interested learners? You have to recruit!
- Consider making a brochure or flyer personal to your school and course offerings for your department.
- Have projects and pictures of students engaged on display in your classroom.
- Download this FREE poster from ITEEA here to help you explain your technology and engineering program to parents:

<http://www.iteea.org/File.aspx?id=41119&v=53916269>



## Specialist Contact

Mary Rinehart

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317-232-0815



# Family and Consumer Sciences and Work Based Learning

Teachers' Toolbox

April 2016

Joined together Rose Quartz and Serenity demonstrate an inherent balance between a warmer embracing rose tone and the cooler tranquil blue, reflecting connection and wellness as well as a soothing sense of order and peace.

Leatrice Eiseman Executive Director,  
Pantone Color Institute®

## Pantone Color of the Year 2016

For the first time, two colors are chosen as the Pantone Color of the Year. Find out more about the current Pantone Color of the Year and past colors.

[Pantone Website](#)

### Design Trends in the Classroom

Help students explore this design trend and many others by completing the FCCLA Trend Board State Project. It is a great resource to use in the classroom.

[FCCLA Trend Board](#)

## What to Look for in a Partner for WBL

Partners should possess these qualities

- A Focus on Students
- A Clear Benefit for Themselves
- Time
- Resources
- A "Team" Approach
- Dependability
- Understanding



## April is Distracted Driving Awareness Month

Project ideas to promote safety

- Partner with FCCLA and State Farm to complete a project in April
- Have students sign a pledge to not drive distracted

Promote the Drive 2N2 Campaign

- 2 eyes on the road
- 2 hands on the wheel



What does the term non-traditional mean in CTE?

Definition- **Occupation or field of work dominated by one gender.**

How is this information used?

**This information is used to determine which of our secondary pathways fall into a category of non-traditional pathways.**

## Professional Development Spring

### Family and Consumer Sciences Conference

April 21<sup>st</sup>-April 22<sup>nd</sup>

Ivy Tech Corporate College

2820 N. Meridian St. Indianapolis, IN

[Registration Information](#)

## Specialist Contact

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